

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of the claims in this application:

Claim 1. (Currently Amended) A recording and /or reproducing apparatus comprising:

storage means having a management area and a data area; generating means for generating a predetermined value; transforming means for transforming said predetermined value based on a formula which is ~~an individual characteristic of every unique to~~ said recording and/or reproducing apparatus; and control means for controlling storage of said transformed predetermined value in said management area of said storage means.

Claim 2. (Original) The recording and/or reproducing apparatus according to claim 1, further comprising

initializing means for initializing said first storage means so that said storage means has said management area and said data area, wherein

said generating means generates said predetermined value when said initialization is performed.

Claim 3. (Original) The recording and/or reproducing apparatus according to claim 1, wherein said transforming means mapping-transforms said predetermined value.

Claim 4. (Original) The recording and/or reproducing apparatus according to claim 1, wherein said control means controls storage of said transformed predetermined value into said management area of said storage means.

Claim 5. (Original) The recording and/or reproducing apparatus according to claim 4, wherein said storage means comprises first storage means and further comprising:

second storage means for storing said predetermined value;

first read-out means for reading-out said transformed predetermined value stored in said management area of said first storage means,

inverse transforming means for inverse-transforming said transformed predetermined value stored in said management area of said first storage means, where an inverse-transform of said inverse-transforming means corresponds to said transform performed by said transforming means,

second read-out means for reading-out said predetermined value stored in said second storage means,

comparing means for comparing an inverse-transformed value of said inverse-transforming means with said predetermined value read out from said second read-out means, and

authenticating means for performing authentication based on a comparison result of said comparing means.

Claim 6. (Original) The recording and/or reproducing apparatus according to claim 5, wherein said first read-out means reads out a value stored in said management area of said first storage means when electric power is supplied to said recording and/or reproducing apparatus by a user.

Claim 7. (Original) The recording and/or reproducing apparatus according to claim 5, wherein said first read-out means reads out a value stored in said management area when said first storage means is accessed.

Claim 8. (Original) The recording and/or reproducing apparatus according to claim 1, wherein said generating means generates an address based on information from said

management area, and said transforming means transforms said address.

Claim 9. (Original) The recording and/or reproducing apparatus according to claim 8, wherein said generating means comprises:

searching means for locating an unused area of said data area of said storage means based on information retrieved from said management area of said storage means;

logical-link forming means for forming a logical link from a first cluster number corresponding to said unused area, wherein

said transforming means transforms said first cluster number and said control means controls storage of said transformed first cluster number and said logical link in said management area of said storage means.

Claim 10. (Original) The recording and/or reproducing apparatus according to claim 9, further comprising:

first read-out means for reading-out said cluster number and said logical link stored in said management area of said storage means;

inverse-transforming means for inverse-transforming said read cluster number, said inverse-transform corresponding to the transform performed by said transforming means; and

second read-out means for reading-out data from said data area of said storage means according to said logical link from a first cluster number, said first cluster number being said inverse-transformed cluster number.

Claim 11. (Original) The recording and/or reproducing apparatus, according to claim 1, wherein said storage means comprises first storage means and further comprising:

receiving means for receiving data in predetermined units from an external source; and

second storage means for storing said transformed predetermined value, wherein

said control means controls rearranging said data in said predetermined units according to said predetermined value and storing said rearranged data in said first storage means.

Claim 12. (Original) The recording and/or reproducing apparatus according to claim 11, further comprising:

read-out means for reading-out a value from said second storage means; and

inverse-transforming means for inverse-transforming said read-out value, said inverse-transform corresponding to said transform performed by said transforming means, wherein

said control means controls rearranging said data stored in said first storage means in said predetermined units according to said inverse-transformed value.

Claim 13. (Original) The recording and/or reproducing apparatus according to claim 11, wherein said control means controls rearranging said data in units of blocks according to said predetermined value and storing said rearranged data in said storage means.

Claim 14. (Original) The recording and/or reproducing apparatus according to claim 12, wherein said control means controls rearranging said data in reverse order in said predetermined units according to said predetermined value and storing said rearranged data in said first storage means; and  
controls rearranging said data stored in said first storage means in reverse order in said predetermined units according to said inverse-transformed value.

Claim 15. (Original) The recording and/or reproducing apparatus according to claim 1, further comprising: receiving means for receiving data from an external source, wherein said storage means stores said transformed predetermined value and said control means controls rearranging said received data in processing units according to said predetermined value and storing said rearranged data in said storage means.

Claim 16. (Original) The recording and/or reproducing apparatus according to claim 15, further comprising read-out means for reading-out a value stored in said storage means; and inverse-transforming means for inverse-transforming said read-out value, said inverse-transform corresponding to said transform performed by said transforming means, wherein said control means controls rearranging said data stored in said storage means in said processing units according to said inverse-transformed value.

Claim 17. (Original) The recording and/or reproducing apparatus according to claim 16, wherein said storage means stores said transformed predetermined value in a header of said received data;

said control means controls rearranging said data in minimum processing units within said data and storing said data in said storage means;

said read-out means reads out a value from said header of said data stored in said storage means; and

said control means controls rearranging said data stored in said storage means in minimum processing units according to said inverse-transformed value.

Claim 18. (Original) The recording and/or reproducing apparatus according to claim 17, wherein said control means controls rotating said data in said minimum units within said data according to said predetermined value and storing said data in said storage means.

Claim 19. (Original) The recording and/or reproducing apparatus according to claim 1, wherein said storage means is managed by a file allocation table.

Claim 20. (Original) The recording and/or reproducing apparatus according to claim 1, wherein said storage means includes a hard disk.

Claim 21. (Currently Amended) A method for use in a recording and/or reproducing data apparatus including storage means having a management area and a data area, the method comprising the steps of:

generating a predetermined value;

transforming said predetermined value based on a formula which is ~~characteristic at every~~ unique to said recording and/or reproducing apparatus; and

storing said transformed predetermined value in said management area of said storage means.